

## Laboratory Analytical Services

Proposal No: DES-LAB-08-1

### OVERVIEW

The State of New Hampshire Department of Environmental Services (Department) invites the submission of bids to have a contractor perform analytical services as necessary to identify and quantify requested contaminants including, but not limited to metals, volatile organic chemicals, semi-volatile organic chemicals, pesticides/herbicides, polychlorinated biphenyls, hazardous waste characteristics, inorganic constituents, dioxins, bacteria, or for any combination of the preceding as specified by the Department. Analysis shall be by US Environmental Protection Agency (EPA) methods, or other methods as specified/authorized by the Department.

The contract shall become effective upon the date of its approval by the Governor and Council of the State of New Hampshire and expire June 30, 2010.

### SCOPE OF SERVICES

The scope of services to be provided to the Department through this contract shall include the following:

1. The contractor shall, at the request of the State, perform analytical services as necessary to identify and quantify toxic substances, hazardous constituents, or hazardous characteristics in aqueous, air, soil, solid waste, hazardous waste, sludge, or leachate samples, or to identify and quantify sludge management rule Env-Wq 800 regulated contaminants in biosolids, sludge, and septage samples as specified in the Department's bid proposal. The bid proposal is incorporated herein by reference and is attached as Exhibit A-1.
2. The contractor shall perform all analyses requested by the State. If the contractor's laboratory sample capacity precludes the contractor from analyzing the requested samples within hold times, the contractor may subcontract the samples to another accredited laboratory at no additional cost to the State.
3. The contractor shall provide materials such as sample containers, bottles, vials, wipe samples, or air sampling media for collecting the samples. The containers shall be clean and conform to the EPA quality control requirements and procedures.
4. The contractor shall provide occasional consultation on collection methods and interpretation of reports at no additional cost to the State. This consultation shall include occasional testimony at litigation proceedings.

5. The contractor shall follow and maintain the State's chain-of-custody procedures.
6. The contractor shall pick up samples at the Department of Environmental Services, 29 Hazen Drive, Concord NH upon request by the State. For samples determined to be priority samples by the State, the contractor shall conduct pick-ups no later than twenty-four (24) hours after request by the State. Express mail carrier service for sample pick up may be used; however, the contractor must provide all shipping containers and assume responsibility for all mailing costs. Sample transport shall be in iced containers and follow all EPA protocols for sample transport and chain of custody.
7. The contractor shall provide the State with a complete written report of its analyses as required under the scope of work to be performed. Analytical reports shall be formatted in accordance with The NELAC Institute (TNI) standards. Written analytical reports shall be prepared by the contractor and returned or mailed to the State within 3 working days after completion of the sample analyses.
8. The contractor shall perform emergency or priority analyses on certain samples, as determined by the State; verbal reports shall be required in less than 3 working days of receipt of such samples.
9. The contractor shall retain and store samples at 4<sup>0</sup>C until such time as it is notified by the State in writing that disposal is permissible. The contractor shall be responsible for the disposal of samples at no additional cost to the State. Such disposal shall be conducted in accordance with all applicable federal and state regulations adopted pursuant to the federal Resource Conservation and Recovery Act and NH RSA 147-A.
10. The contractor shall perform all Quality Assurance/Quality Control (QA/QC) measures as per the requested method and per the New Hampshire Environmental Laboratory Accreditation Program (NHELAP). Full documentation of QA/QC is not required with the final data package unless specified by the State in advance of sample submission.
11. The contractor shall make available QA/QC data at the request of the State. This information must be retrievable from the contractor's Laboratory Information Management System for a period not less than 5 years and be available for inspection at any time by the State. The contractor shall be subject to any State Quality Assurance/Quality Control audits and inspections by the State.
12. The contractor shall report results for all analytes listed in Exhibit A-1 Section C by the methodology listed and to the detection limits specified therein.
13. For the analytes listed in Exhibit A-1 Section C, the contractor shall employ either a soxhlet (EPA Method 3540) or automated soxhlet procedure (EPA Method 3541) for the extraction process for semi-volatile organic compounds.

14. On occasion, the State may require additional analyses for constituents or methods not listed in Exhibit A-1. Upon request, the contractor may be asked to provide these analyses at a quoted cost.

15. All invoices must be submitted showing unit prices. Payment will be made no later than 30 days after completion of services or after an invoice has been received at the Department's business office, whichever is later. Invoices shall be mailed to Patricia Bickford, Laboratory Services Unit, who will then forward them to the appropriate office.

## BID SUBMISSION AND CONTRACT REQUIREMENTS

Bids must be received at the Department by 1:00 pm on April 25, 2008. Bids must be made on the Department's bid form (Exhibit A-1) and must be typed or clearly printed in ink. Corrections must be initialed. The bidder may attach an addendum or supplements to the signed bid forms. Bids that are not complete or are unsigned will not be considered.

Bids become public information upon opening and may be reviewed after they have been properly recorded. Bid results will not be given by telephone and shall be given by mail only if requested in writing and accompanied by a self-addressed, stamped business size envelope.

The proposal constitutes a firm and binding offer. Determination of whether a bid may be withdrawn is solely at the discretion of the Department. However, in no event shall a bid be withdrawn unless the request for withdrawal is filed within five days of the date of the bid opening, and the bidder establishes that the bid contains a material mistake, and that the mistake occurred despite the exercise of reasonable care.

Additional charges for taxes, labor, mailing or shipping costs, or special handling costs for hazardous materials or temperature control, analytical reruns, etc. are not permitted. All costs must be included in the price per sample.

The successful bidder will be required to sign the State of New Hampshire's standard contract with the Department. A copy of the contract is enclosed with this request for bids as Form P-37. The successful bidder must also provide a current Certificate of Good Standing issued by the Secretary of State for the State of New Hampshire and a Certificate of Authority demonstrating that the person who signs the contract is authorized to do so on behalf of the company.

## BID AWARD CRITERIA

QUALIFICATION REQUIREMENTS: Bidders must submit a qualification package that includes the following information:

Bidder must demonstrate they are currently listed on the New Hampshire list of accredited laboratories (NH ELAP).

Bidder must submit copy of their Laboratory Quality Systems Manual, an example of a standard deliverables package, and a listing of standard turn around times and communications measures taken when a QC, detection limit, or hold time problem is encountered.

Bidders must be able to satisfactorily demonstrate to the Department their capabilities to perform all of the services listed in the SCOPE OF SERVICES and to perform these services in accordance with the Department's time and quality requirements.

For the services requested in Exhibit A-1 Section C, bidders must demonstrate that, except for dioxin analysis by EPA Method 1613 and bacteria testing for fecal coliform, they shall not subcontract requested analyses to another laboratory.

Bidder shall affirmatively state their agreement to perform the requested services in accordance with the provisions of the State of New Hampshire's standard contract (Form P-37).

**AWARD CRITERIA:** The Department of Environmental Services will first evaluate each bid package to ensure completion of all bid qualification requirements. Only bidders who submit a complete bid package will be considered for the award.

The bid award will be made to the qualified bidder with the lowest total bid price for the test matrix presented below using the specified quantities for each parameter. In case two or more bidders quote the same lowest total cost, the bid award will be made to the qualified bidder with the lowest total bid price for all parameters listed in Exhibit A-1 using the assumption of one each for each parameter.

The Department reserves the right to reject any or all bids or any part thereof.

<b>MATRIX FOR CALCULATING COST OF ANALYSES</b>			
<u>Parameter</u>	<u>Unit Price</u>	<u>Number of Tests</u>	<u>Total Price</u>
Metals		100	
ABN		25	
PAH		10	
TOC (soil)		20	
Methane/Ethane/Ethene		75	
Flashpoint		10	
Perchlorate		10	
SPLP extract + metals analysis		5	
COD		5	
Volatile Fatty Acids		10	
VOC (low level)		3	
Full Exhibit A-1 Section C analysis		20	
<b>TOTAL</b>			

EXHIBIT A-1

BID FORM

The undersigned hereby offers to perform services for the New Hampshire Department of Environmental Services as specified at the prices quoted in Exhibit A-1 in complete accordance with the provisions set forth in this bid form.

Return one copy of the bidder qualification requirements materials together with two copies of the completed Exhibit A-1 to Patricia Bickford, Department of Environmental Services, Lab Services Unit, PO Box 95, 29 Hazen Dr., Concord NH 03302-0095. This bid must be received no later than 1 pm on April 25, 2008.

BIDDER \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Type or print name of authorized signatory

\_\_\_\_\_  
Signature of authorized person

Date: \_\_\_\_\_

## EXHIBIT A-1

### SECTION A

The following analytical services are required. A quotation must be provided for each analysis listed. Price shall be quoted on a per sample basis; all sample preparation costs and repeat analytical runs are to be included in the cost except where itemized; price is same for all matrices. Quotations should also be provided for additional costs for priority analyses performed in less than five (5) days. Where a method is not specified, indicate the method and/or method revision to be used. If a subcontractor will be used, this must be indicated for each analyte and the final cost quoted.

#### I. WASTE CHARACTERIZATION

ANALYTE	EPA METHODS	PRICE PER SAMPLE	PRIORITY PRICE
Corrosivity	9040/9045	_____	_____
Reactivity:			
Releasable Cyanide	_____	_____	_____
Releasable Sulfide	_____	_____	_____
Ignitability:	1010/1030	_____	_____
<b>TCLP or SPLP ANALYSIS</b>			
Extraction for Volatiles (ZHE)	1311/1312	_____	_____
Extraction for SOC, Metals, Pest, Herb	1311/1312	_____	_____
Analytical charges:			
Volatiles	8260	_____	_____
Semi-Volatiles	8270	_____	_____
Pesticides	8081	_____	_____
Herbicides	8151	_____	_____
Metals	_____	_____	_____

#### II. ORGANIC ANALYSES

Volatiles (aqueous)	524.2/624/8260	_____	_____
Volatiles (soil- 5035)	8260	_____	_____
Base Neutral/Acid Extractables	625/8270	_____	_____
Acid Extractables	625/8270	_____	_____
Base Neutral Extractables	625/8270	_____	_____
Polynuclear Aromatic Hydrocarbons	625/8270/8310	_____	_____
Organochlorine Pesticides	608/8081	_____	_____
Organochlorine Pesticides & PCB's	608/8081+8082	_____	_____
Methane/Ethane/Ethene	_____	_____	_____
PCB's in Water/Soil	608/8082	_____	_____
PCB's in Oil	ASTM	_____	_____
PCB's on Wipes/Filter	ASTM	_____	_____
PCB's in Tissue	_____	_____	_____

#### III. INORGANIC ANALYSES

Flashpoint	ASTM D93-77	_____	_____
Metals (cost per metal)**	_____	_____	_____

\*\*Metals by requested EPA method including required digestion for any sample submitted.

## EXHIBIT A-1

### SECTION B

The following analytical services are requested on a less frequent basis. Where a method is not specified, indicate the method and/or method revision to be used for drinking water, waste water and/or hazardous waste. If a subcontractor will be used for these analyses, this must be indicated for each analyte with the final cost quoted.

ANALYTE	METHOD	PRICE PER SAMPLE
<b>I. ORGANIC ANALYSES</b>		
Chlorinated Phenoxy Herbicides	8151/515/555	_____
Carbon Dioxide in Monitored	_____	_____
Natural Attenuation		
Polychlorinated Dibenzo-p-	1613/8280/8290	_____
Dioxins and Polychlorinated		
Dibenzofurans		
Formaldehyde	8315	_____
Haloacetic Acids	552.2	_____
Hexane Extractable Material	1664	_____
Organophosphorus Pesticides	8141	_____
Total Petroleum Hydrocarbons	8015	_____
VOA's in air-Tedlar Bags	TO1 /TO15	_____
VOA's in air-SUMMA canisters	TO15	_____
Total Organic Carbon (aqueous)	_____	_____
Total Organic Carbon (solid)	_____	_____
Total Organic Halide (TOX)	_____	_____
Volatile Fatty Acids	_____	_____
Volatiles(low level soil-bisulfate)	8260	_____
Polytetrafluoroethylene (PTFE)	_____	_____
Perfluorooctanoic Acid (PFOA)	_____	_____
Polyfluorinated diphenyls (PBDE)	_____	_____
<b>II. INORGANIC ANALYSES</b>		
Ammonia-N	_____	_____
Chemical Oxygen Demand	_____	_____
Cyanide	_____	_____
Chloride (in waste samples)	9056/9253	_____
Grain Size	_____	_____
MBAS	_____	_____
Orthophosphate	_____	_____
Perchlorate	_____	_____
Sulfide	_____	_____
Total Kjeldahl Nitrogen	_____	_____
Total Phenols	_____	_____
Total Phosphorus	_____	_____
% Solids	_____	_____
% Sulfur	ASTM D129-64	_____



# EXHIBIT A-1

## SECTION C

The following analytical services are requested to meet the requirements of the sludge management rule Env-Wq 800. The price quoted is final cost per sample and includes all sample preparation and repeat analytical runs. If a subcontractor will be used for these analyses, this must be indicated for each analyte group with the final cost quoted.

### Section C-1. Volatile Organic Compounds

#### METHOD

#### PRICE PER SAMPLE

#### SW 8260B

Compound	Det Limit		Compound	Det Limit
	mg/kg			mg/kg
Dichlorodifluoromethane	2.0		Chloromethane	2.0
Vinyl chloride	2.0		Bromomethane	2.0
Chloroethane	2.0		Trichlorofluoromethane	2.0
Diethyl ether	5.0		Acetone	5.0
1,1-Dichloroethene	2.0		Methylene chloride	2.0
Carbon disulfide	2.0		Methyl-tert-butyl ether	2.0
trans-1,2-Dichloroethene	2.0		1,1-Dichloroethane	2.0
2-Butanone	2.0		2,2-Dichloropropane	2.0
cis-1,2-Dichloroethene	2.0		Chloroform	2.0
Bromochloromethane	2.0		Tetrahydrofuran	2.0
1,1,1-Trichloroethane	2.0		1,2-Dichloropropene	2.0
Carbon tetrachloride	2.0		1,2-Dichloroethane	2.0
Benzene	2.0		Trichloroethene	2.0
1,2-Dichloropropane	2.0		Dichlorobromomethane	2.0
Dibromomethane	2.0		4-Methyl-2-pentanone	2.0
cis-1,3-Dichloropropene	2.0		Toluene	2.0
trans-1,3-Dichloropropene	2.0		1,1,2-Trichloroethane	2.0
2-Hexanone	5.0		1,3-Dichloropropane	2.0
Tetrachloroethene	2.0		Dibromochloromethane	2.0
1,2-Dibromoethane	2.0		Chlorobenzene	2.0
1,1,1,2-Tetrachloroethane	2.0		Ethylbenzene	2.0
m&p-Xylene	10		o-Xylene	5.0
Styrene	2.0		Bromoform	2.0
Isopropylbenzene	5.0		1,1,2,2-Tetrachloroethane	2.0
1,2,3-Trichloropropane	2.0		n-Propylbenzene	5.0
Bromobenzene	2.0		1,3,5-Trimethylbenzene	5.0
2-Chlorotoluene	2.0		4-Chlorotoluene	2.0
tert-Butylbenzene	5.0		1,2,4-Trimethylbenzene	5.0
sec-Butylbenzene	5.0		p-Isopropyltoluene	5.0
1,3-Dichlorobenzene	5.0		1,4-Dichlorobenzene	5.0
n-Butylbenzene	5.0		1,2-Dichlorobenzene	5.0
1,2-Dibromo-3-chloropropane	2.0		1,2,4-Trichlorobenzene	2.0
Hexachlorobutadiene	2.0		Naphthalene	5.0
1,2,3-Trichlorobenzene	2.0			

**SectionC- 2. Semi-volatile Compounds**
**METHOD**
**PRICE PER SAMPLE**
**SW 8270D**

<b>Compound</b>	<b>Det Limit</b>		<b>Compound</b>	<b>Det Limit</b>
	<b>mg/kg</b>			<b>mg/kg</b>
1,2-Diphenylhydrazine (as Azobenzene)	2.5		2,4,5-Trichlorophenol	5.0
2,4,6-Trichlorophenol	2.5		2,4-Dichlorophenol	2.5
2,4-Dimethylphenol	2.5		2,4-Dinitrophenol	12
2,4-Dinitrotoluene	2.5		2,6-Dinitrotoluene	2.5
2-Chloronaphthalene	10		2-Chlorophenol	2.5
2-Methylnaphthalene	5.0		2-Methylphenol	5.0
2-Nitrophenol	5.0		3,3'-Dichlorobenzidine	4.0
3-Nitroaniline	5.0		3&4-Methylphenol	5.0
4,6-Dinitro-2-methylphenol	12		2-Nitroaniline	5.0
4-Bromophenyl phenylether	10		4-Chloro-3-methylphenol	10
4-Chloroaniline	2.5		4-Chlorophenyl phenylether	10
4-Nitroaniline	5.0		4-Nitrophenol	12
Acenaphthene	5.0		Acenaphthylene	5.0
Anthracene	5.0		Benzidine	12
Benzo(a)anthracene	2.5		Benzo(a)pyrene	2.5
Benzo(b)fluoranthene	5.0		Benzo(g,h,i)perylene	5.0
Benzo(k)fluoranthene	5.0		bis(2-Chloroethoxy)methane	5.0
bis(2-Chloroethyl) ether	2.5		bis(2-Chloroisopropyl)ether	2.5
bis(2-Ethylhexyl)phthalate	5.0		Butylbenzyl phthalate	5.0
Carbazole	2.5		Chrysene	5.0
Di-n-butyl phthalate	5.0		Di-n-octyl phthalate	5.0
Dibenzo(a,h)anthracene	2.5		Dibenzofuran	5.0
Diethyl phthalate	5.0		Dimethyl phthalate	5.0
Fluoranthene	5.0		Fluorene	5.0
Hexachlorobenzene	2.5		Hexachlorocyclopentadiene	5.0
Hexachloroethane	2.5		Indeno(1,2,3-cd)pyrene	2.5
Isophorone	2.5		n-Nitroso-di-n-propylamine	2.5
n-Nitrosodimethylamine	4.0		n-Nitrosodiphenylamine	2.5
Nitrobenzene	2.5		Pentachlorophenol	4.0
Phenanthrene	5.0		Phenol	5.0
Pyrene	5.0			

**Section C-3. Pesticides**
**METHOD**
**PRICE PER SAMPLE**
**SW 8081B**

<b>Compound</b>	<b>Det Limit</b>		<b>Compound</b>	<b>Det Limit</b>
	<b>mg/kg</b>			<b>mg/kg</b>
Aldrin	0.3		gamma-BHC (Lindane)	0.3
alpha-BHC	0.3		delta-BHC	0.3
beta-BHC	0.3		Chlordane	0.8
4,4'-DDT	0.3		4,4'-DDE	0.3
4,4'-DDD	0.3		alpha-Endosulfan	0.3
beta-Endosulfan	0.3		Endosulfan sulfate	0.3
Endrin	0.3		Endrin aldehyde	0.3
Heptachlor	0.3		Heptachlor epoxide	0.3
Toxaphene	0.8			

#### Section C-4. Polychlorinated Biphenyls

#### METHOD

#### PRICE PER SAMPLE

SW 8082A

Compound	Det Limit		Compound	Det Limit
	mg/kg			mg/kg
PCB-1242	1.0		PCB-1254	1.0
PCB-1221	1.0		PCB-1232	1.0
PCB-1248	1.0		PCB-1260	1.0
PCB-1016	1.0			

#### Section C-5. Metals

#### METHOD

#### PRICE PER SAMPLE

SW 846 6000/7000 series

Metal*	Det Limit		Metal	Det Limit
	mg/kg			mg/kg
Total Arsenic	10		Total Cadmium	1.0
Total Chromium	10		Total Copper	10
Total Lead	11		Total Mercury	0.05
Total Molybdenum	18		Total Nickel	10
Total Selenium	18		Total Zinc	10
Total Antimony	8		Total Beryllium	0.1
Total Silver	4.0		Total Thallium	10

\* Metals price per sample must include required digestion.

#### Section C-6. Additional Analyses

	Det Limit mg/kg	METHOD	PRICE PER SAMPLE
pH		SM-4500-H or SW846 9045C	
Percent solids		SM-2540G or CLP-4F	
Nitrate-nitrite	30	SM-4500-NO <sub>3</sub> , SW846-9210 or EPA 353-3000 series	
Total Kjeldahl nitrogen	300	SM-4500-N <sub>org</sub> or EPA-351.3	
Ammonia nitrogen	30	SM-4500-NH <sub>3</sub> or EPA-350	
Total organic nitrogen		calculation	
Potassium	15	SM-3500-K or SW846 6000/7000 series	
Phosphorus	15	SM-4500-P or EPA-365	

**Section C-7. Dioxins*****METHOD******PRICE PER SAMPLE*****EPA 1613 A or B**

<b>Compound</b>	<b>Det Limit</b>		<b>Compound</b>	<b>Det Limit</b>
	<b>ppt TEQ</b>			<b>ppt TEQ</b>
2,3,7,8 TCDD & 2,3,7,8 TCDF	5		Remaining congeners of 2,3,7,8 TCDD	5

**SectionC- 8. Cyanide**

	<b>Det Limit</b>	<b>METHOD</b>	<b>PRICE PER SAMPLE</b>
	<b>mg/kg</b>		
Total cyanide	10	SM-4500-CN or SW846 9010B	

**Section C-9.**

	<b>Det Limit</b>	<b>METHOD</b>	<b>PRICE PER SAMPLE</b>
Fecal coliform	1000 MPN/g	SM 9221E, SM 9222 D or Methods 1680 or 1681	

**TOTAL COST PER SAMPLE FOR A FULL EXHIBIT A-1 SECTION C ANALYSIS**

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